

# Work Order ID 82333

**\*82333\***

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March-28-12 4:04:42 PM

Item ID: D2154 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Stud Bracket  
 Start Date: 28/03/2012 Start Qty: 20.00 **\*20\*** Cust Item ID:  
 Required Date: 11/04/2012 Req'd Qty: 20.00 **\*20\*** Customer:  
 Reference:

Approvals: Process Plan: WLS Date: 12/03/12 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2154	Rev C

100 FLOW WATER JET 0.00  
**\*100\***  
 Waterjet Memo 0.00  
 FLOW CNC Waterjet 1-Cut as per Dwg D2154 Dwg Rev: C Prog Rev: C 2-  
304 . 063 Deburr if necessary

Jm 12 04 03 56  
RB 1

110 QC2- Inspect parts off machine FAI/FAIB 0.00  
**\*110\***  
 QC Memo 0.00  
 Quality Control

Jm 12 04 03 56  
RB

120 QC8- Inspect parts - second check 0.00  
**\*120\***  
 QC Memo 0.00  
 Quality Control

cont  
56

5/2/04/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 <b>*130*</b> Small Fab Small Fab	Small Fab  Memo Deburr if necessary	0.00 <i>2/1/12</i>							
140 <b>*140*</b> Brake NC Brake NC	NC BRAKE  Memo Form as per Dwg D2154Rev: <u>C</u>	0.00 0.00		<i>SB 12/04/04</i>				<i>56</i>	
150 <b>*150*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		<i>8/12/04</i>				<i>cont</i> <i>KS6</i>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 82333

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Item ID: D2154 Accept **\*N900040100\*** Setup Start **\*NS1\***  
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 Item Name: Stud Bracket  
 Start Date: 28/03/2012 Start Qty: 20.00 **\*20\*** Cust Item ID:  
 Required Date: 11/04/2012 Req'd Qty: 20.00 **\*20\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 <b>*160*</b> Powdercoat Powder Coating <i>m120222</i>	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel  Memo START TIME: <i>1:00</i> FINISH TIME: <i>1:30</i>	0.00 0.00				<i>56x0</i>			<i>m12/04/11</i>
170 <b>*170*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00				<i>56</i>	<i>0</i>		<i>12/04/11</i>
180 <b>*180*</b> Packaging Packaging	Identify as per dwg & Stock Location: <i>J</i>  Memo	0.00 0.00				<i>560</i>			<i>12/04/10</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 82333****\*82333\***

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Item ID: D2154

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Stud Bracket

Start Date: 28/03/2012 Start Qty: 20.00

**\*20\***

Cust Item ID:

Required Date: 11/04/2012 Req'd Qty: 20.00

**\*20\***

Customer:

Reference:


Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
<b>*190*</b>									
QC	Memo	0.00							
Quality Control									

12/4/17 mf  
12-04-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Page 1

Work Order ID: 82333

**\*82333\***

Parent Item: D2154

**\*D2154\***

Parent Item Name: Stud Bracket

Start Date: 28/03/2012

Required Date: 11/04/2012

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP: C03.08.08Reformat; Remove TumbleKJ/RF  
IPP Rev:D NowOn Waterjet 07-04-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M304S16GA

Purchased

No

100

sf

343.6860

0.0333

0.701053

56

2

**\*M304S16GA\***

\*\*

304/316 Sheet .063

Location

Loc Qty

Loc Code

MAT020

343.686

120866

48.18

120877

146.506

121070

149

120866

JM

12/04/03

RB

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

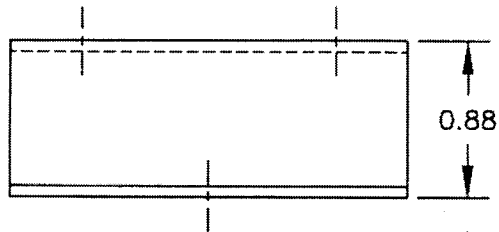
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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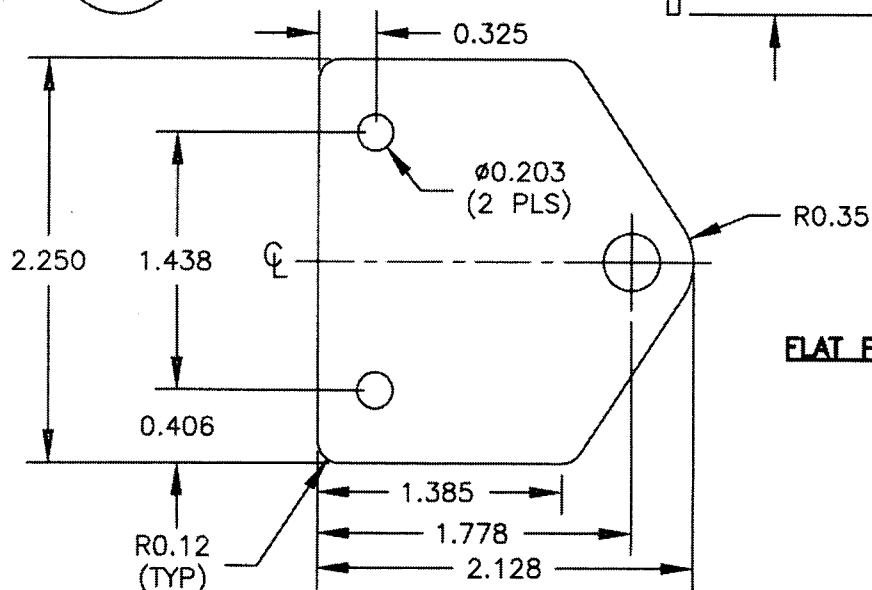
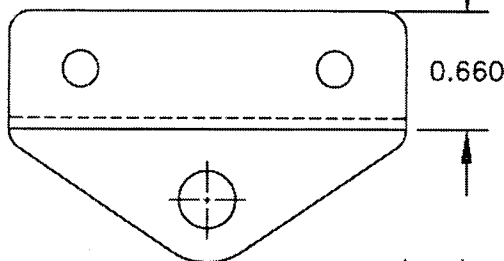
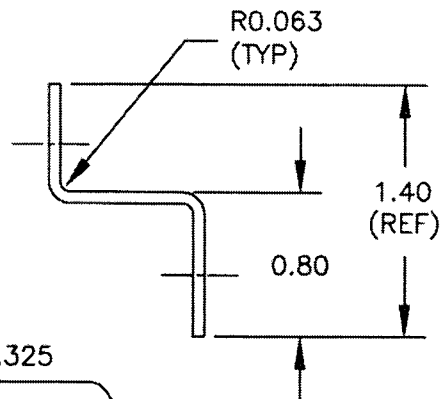


DESIGN GH	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2154	REV. C SHEET 1 OF 1
DATE 04.10.12	TITLE BRACKET, STUD		SCALE 1:1
A	92.07.28	NEW ISSUE	
B	98.09.15	UPDATE FLAT PATTERN; ADD P/COAT	
C	04.10.12	0.88 WAS 0.875; 2.128 WAS 2.068	

RELEASED  
04.10.15 *[Signature]*



### BEND DETAIL



### FLAT PATTERN

#### D2154 NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 0.063 THICK (M304S16GA)
- 2) FINISH: POWDER COAT WHITE (REF: 4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH PART NUMBER AND BATCH NUMBER USING A FINE POINT PERMANENT INK MARKER.

SHOP COPY  
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WITHOUT NOTICE  
WORK ORDER  
NO. 82333 MJS  
12/05/29

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# Dart Aerospace Ltd

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